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REPORT TO CONGRESS

REVIEW OF THE IMPACT OF OUTLIER AND TRANSFER PAYMENT POLICIES UPON RURAL HOSPITALS

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Secretary

Department of Health and Human Services

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This "Review of the Impact of Outlier and Transfer Payment Policies Upon Rural Hospitals" was prepared in response to Section 9113 of Public Law 99-272, the Consolidated Omnibus Budget Reconciliation Act (COBRA) which states:

> (a) Review. The Secretary of Health and Human Services shall review the impact of policies respecting outliers and patient transfers on payments under Section 1886(d) of the Social Security Act to rural hospitals (particularly on hospitals with less than 100 beds).
>
> (b) Report. The Secretary shall report to Congress on findings of the review not later than January 1, 1987, and shall include in the report recommendations on changes in policies respecting outliers and transfer patients to the extent they adversely affect rural hospitals.

OVERVIEW

This report was prepared intramurally at a cost of less than $10,000. The report has three parts. Part I briefly describes the mandate, the review approach, the policies under review and the conclusions. Part II reviews the outlier payment policy under Medicare's Prospective Payment System (PPS) and its impact on rural hospitals. Part III considers the impact of the PPS transfer case payment policy on rural hospitals.

REVIEW OF THE PPS OUTLIER PAYMENT POLICY

The PPS outlier payment policy was developed to implement Section 1886(d)(5)(A) of P.L. 98-21. This law states in effect that at least 5 percent but no more than 6 percent of Federal prospective payments be established for outlier cases, those involving extraordinarily long lengths of stay (LOS) or high costs. To implement this requirement, HCFA has established and updated each year the thresholds for duration of stay and level of costs which identify cases which may qualify for additional payments as outliers.

For this review, a comprehensive analysis of FY 1984 cases was undertaken to determine the impact of the outlier payment policy upon rural hospitals. The report on this review is in addition to the analyses performed last year related to enactment and implementation of Section 9302(b) of P.L. 99-509, the Omnibus Budget Reconciliation Act of 1986 (OBRA 86). This section provided that separate adjustments to standardized payment amounts for urban and rural hospitals be made according to their outlier experience. We believe that this legislation effectively corrected the disparity that arose from using a uniform percentage reduction in standardized payment amounts to establish funding for outlier cases.

The highlights from this review of the impact of the outlier payment policy are:

- Aggregate outlier payments during FY 1984 were only 53 percent of the anticipated amount, due to the unanticipated steepness of the decline in Medicare average length of stay (ALOS) under PPS. As post-PPS data become available for use in setting the outlier thresholds, the method for

setting the thresholds will more accurately anticipate the actual outlier experience, and the disparity between actual and anticipated outlier payments should be reduced.

- Large, urban and teaching hospitals have more outlier cases and payment than small, rural and nonteaching hospitals.

- The redistributive effect of the pre-OBRA 86 outlier payment policy is small, but results in some shifting of payments from small, rural and nonteaching hospitals to large, urban and teaching hospitals.

- The changes provided by OBRA 86 (affecting the funding of outlier payments and the calculation of PPS payment rates) should reduce the disparity between urban and rural hospitals' Medicare operating margins beyond FY 1986.

Based upon this review, we believe that no further changes in outlier payment policy, specifically targeted to rural hospitals, are needed. However, we are continuing to review potential changes in general outlier payment policy which might improve its protective value for all hospitals. On June 10, 1987 we published in the Federal Register two proposed changes to the outlier regulations. One change would apply the cost outlier payment methodology to those long stay outlier cases which also meet the cost outlier criteria. The second change, predicated upon recent results of research by the Rand Corporation, would raise the marginal cost payment rate for cost outliers from the present 60 percent to 80 percent,

with corresponding increases in the outlier thresholds. These changes were meant to improve equity in payment for the most costly cases. On September 1, we published a final regulation in the Federal Register stating that based upon public comments we would continue with the current outlier policy until we complete our analysis. In particular, we are developing a methodology for calculating hospital-specific cost-to-charge ratios for use in adjusting charges to costs for comparison with the cost outlier threshold.

REVIEW OF TRANSFER POLICY

Transfer policy was developed by HCFA to provide a payment arrangement for the approximately 2 percent of Medicare cases which involve inpatient care in more than one hospital. For PPS hospitals, the current policy pays a per diem for days of care until transfer (but not more than the DRG rate), and pays the full DRG rate to the hospital which ultimately discharges the patient. The analyses performed for this review focus on some 200,000 transfers in Federal fiscal year 1984.

This review showed that most transfer cases involve only two providers, but some involve as many as four. Some 78 percent of all transfers from rural hospitals are to urban institutions. Rural hospitals receive fewer (1.2 percent versus 1.9 percent of cases) transfers than urban hospitals and transfer out more cases (3.3 percent versus 1.4 percent) than do urban hospitals. Among the rural hospitals, larger hospitals typified by Regional Referral Centers stand out for their relatively high share (2.5 percent) of cases that are received as transfers. The smaller rural hospitals (under 100 beds) receive less than 1 percent of their cases as transfers and transfer out about 4.5 percent of their Medicare cases.

Both ALOS and charges were examined for the top 30 diagnosis related groups (DRGs) involved in transfer cases. Major findings include:

- Only 18.7 percent of the transfers involved the same DRG assignment by both hospitals.

- In 7 of 10 cases involving different DRGs, the cost weight was higher for care reported by the receiving hospitals.

- The combined LOS for transfer cases exceed the ALOS for nontransfers.

- In 24 of the 30 studied DRGs, the receiving hospital's LOS exceeds the ALOS for nontransfer cases in the same DRG.

- In 17 of the 30 DRGs, the sending hospital's ALOS exceeded the geometric mean LOS for all cases in the DRGs. Thus, the sending hospital was frequently paid the full DRG rate (as was the receiving institution).

This review considered several alternative policy approaches for transfer cases. These include a single payment to one hospital (which it would share with the other), new DRG categories and weights for transfer cases, and full DRG payments to each hospital. We conclude that no persuasive case can be made that current PPS transfer case policy is inappropriate and find that neither small rural hospitals nor rural hospitals as a group are negatively affected by the current policy.

REVIEW OF THE IMPACT OF OUTLIER AND TRANSFER PAYMENT POLICIES UPON RURAL HOSPITALS

Part One -- INTRODUCTION

This report responds to Section 9113 of Public Law 99-272, (COBRA), which states:

(a) Review. The Secretary of Health and Human Services shall review the impact of policies respecting outliers and patient transfers on payments under Section 1886(d) of the Social Security Act to rural hospitals (particularly on rural hospitals with less than 100 beds).

(b) Report. The Secretary shall report to Congress on findings of the review not later than January 1, 1987, and shall include in the report recommendations on changes in policies respecting outliers and patient transfers to the extent they adversely affect rural hospitals.

APPROACH

Since the inception of PPS, we have continuously monitored program experience in order to optimize the goals for prospective payment. The principal subjects of this report -- outliers, transfer patients, and rural hospital impact-- have also been major foci of our internal analyses and policy reviews. The outcomes of these analyses and reviews are important parts of the annual PPS rulemaking process and have been regularly presented at hearings and shared with congressional staffs.

Analyses for this report were performed by staff of the Office of Research and Demonstrations and the Bureau of Eligibility, Reimbursement and Coverage of the Health Care Financing Administration (HCFA). The analyses were conducted using Medicare program data systems. Data processing support was provided by HCFA's Bureau of Data Management and Strategy, Office of Statistics and Data Management.

OUTLIER POLICIES

Part Two presents the analysis of the impact of outlier payment policy on rural hospitals. By way of contextual background, the Administration's proposed 1983 legislation for hospital prospective payment had no provision for special payment of cases with extraordinarily high costs or long stays. However, Public Law 98-21 included a provision, Section 1886(d)(5)(A), which requires that such "outlier" cases receive additional payments, and that such payments in total be no less than 5 percent or more than 6 percent of Federal prospective payment amounts. The Act also required that urban and rural payment rates be calculated separately and that total payments under PPS for FY 1984 and 1985 be identical or "budget neutral" to payments anticipated under the requirements of the Tax Equity and Fiscal Responsibility Act of 1982.

The only data available to HCFA for implementing these "outlier" case payment provisions and establishing thresholds for identifying cases whose cost or length qualified for additional payment were the 1981 Medicare admissions of a 20 percent sample of beneficiaries. As was shown in the 1985 Annual Report on the Impact of the Medicare Prospective Payment System issued May 20, 1987, actual

outlier payments for fiscal year 1984 were 1.17 percent of total basic PPS payments rather than the anticipated 2.19 percent (see Chapter 2 for a discussion of this issue). The less than expected outlier payments occurred because there were nationwide decreases in ALOS so that fewer outlier cases occurred than had been estimated from the 1981 data.

Outlier payment policy has been reviewed in each annual PPS regulation process. For 1985, the thresholds were adjusted in a manner intended to minimize the impact on the update of the standardized payment amounts. When DRG relative payment weights were recalibrated for FY 1986, outlier thresholds were also recalculated using actual PPS LOS and cost data. However, Congress delayed the proposed October 1, 1985 effective date for these and other proposed PPS changes for FY 1986 until May 1986. Hence, the intended effect from recalculation of outlier thresholds might not have been reached in 1986. More recently, Congress changed the manner in which outliers are funded, ending cross-subsidization of urban outliers by rural hospitals, effective FY 1987. Finally, the Administration is considering certain other changes to improve the equity of payments for outliers cases that would be effective in FY 1989.

TRANSFER POLICIES

Part III presents the analysis of transfer policy impact on payments to rural hospitals. Current policy in 42 CFR 412.4 requires that payment be made to each facility in cases of a Medicare beneficiary being transferred from one facility and readmitted to another facility.

Regulations provide three types of circumstances under which payment will be made to each facility involved in transfer cases.

(1) between hospitals that are each paid under the PPS,

(2) between a PPS hospital and a hospital which has not yet implemented PPS but will at a later date, and

(3) between a PPS hospital and a hospital or unit not required to participate in PPS.

Current policy concerning transfers between PPS hospitals provides for transferring hospitals (there may be more than one per case) to receive payment on a per diem basis. Transferring hospitals may also receive additional payment for extraordinarily high costs cases that meet the outlier criteria, but are not eligible for additional day outlier payments. Full DRG payments, including cost or day outlier payments for qualified cases, are made to the hospital which ultimately discharges the case. For the other two types of circumstances the policy is similar, except that the hospitals which are not paid on a PPS basis are paid on a reasonable cost basis.

Transfer cases are a special object of Peer Review Organization (PRO) surveillance. From July 1984 to September 1986, PROs completed 164,963 reviews, of which 2,712 cases were denied (1.6%). In addition, PROs reviewed 75,660 transfers to exempt units (psychiatric, rehabilitation, alcohol/DRG, swing bed) of which 3,703 were denied (4.8%).

In our regulatory proposals, we have announced on several occasions our desire to develop an ideal approach which made a single payment for all cases, regardless of the number of transfers that might be involved. However, we have not yet been able to work out any better approach than the current system that would be budget neutral and more appropriate for both patients and providers.

CONCLUSIONS

We believe that the changes in outlier payment methodology contained in section 9302(b)(1) of Public Law 99-509 corrected the disparity that arose from using a uniform percentage reduction in standardized payments to provide funding for outlier cases. We will, however, continue to pursue changes in outlier payments that might improve their protective value for all hospitals.

We believe that, overall, the PPS transfer case payment policies have been beneficial to rural hospitals relative either to a budget neutral policy which paid a single total payment to the first transferring hospital but obligated it to provide for all subsequent inpatient hospital care until discharge, or to one which made a single payment to the hospital that ultimately discharged the case but obligated it to provide for payment of the care provided by transferring hospitals.
The present policy is also more practical than would be establishment of separate DRG categories for transfer cases and offers more appropriate incentives than would a policy of making full DRG payment to each hospital.

In summary, this review concludes that current outlier and transfer payment policies do not adversely impact small rural hospitals or rural hospitals overall.

Part Two: THE IMPACT OF THE PPS OUTLIER PAYMENT POLICY ON RURAL HOSPITALS

Introduction

In October 1983, the Medicare program changed the way that most hospitals are paid for treating Medicare patients. Under the new Medicare hospital PPS, total inpatient operating costs per discharge incurred by the hospital are reimbursed according to a prospectively determined payment rate for each discharge, depending on the diagnostic characteristics of the patient and certain characteristics of the hospital and the area in which it was located. The prospective payment rate for each discharge is based on the average cost of treating patients in the same DRG, rather than the actual cost of treating that case. The hospital is thus at risk for the difference between the payment and the actual cost, realizing a profit on cases that are less costly and incurring a loss on cases that are more costly than average.

Included in the PPS legislation (Public Law 98-21, the Social Security Amendments of 1983) was a provision by which an additional payment would be made for "outlier cases"--cases with exceptionally long stays or high costs compared to other cases in the same DRG. The purpose of this chapter is to examine the impact of this provision, with specific emphasis on rural hospitals. First, the development of the PPS outlier payment policy is discussed. Then, data from fiscal year 1984 PPS hospital stay records are used to show the aggregate number of outlier cases and amount of outlier payments. Patient and hospital-level data are then examined to describe the distribution of outlier cases during the first year of PPS and the distributive impact of the PPS outlier payment policy by hospital type. This chapter concludes with a discussion of the implications of

recent changes in the calculation of prospective payment rates and the way that outlier payments are funded.

The Development of the PPS Outlier Payment Policy

Background

PPS now covers almost all of the short-stay hospitals participating in the Medicare program, providing a prospectively determined payment for each Medicare discharge. The PPS rate for each discharge is based on the average cost of all cases classified in the same DRG. The designers of PPS recognized from the outset that, in any given year, hospitals would treat some patients who cost more than the prospective payment rate (causing a loss) and some patients who cost less (generating a surplus). It was expected that, for most hospitals, small surpluses and losses would average out over many cases (according to the statistical "law of large numbers"), so that, on average, financial problems would be avoided by efficient hospitals. It was also understood, however, that this averaging might not apply in all cases, for three reasons:

- The law of large numbers might not protect hospitals with small numbers of discharges or those which, by sheer chance, had an unusually large number of outlier cases.

- Outlier cases might be unevenly distributed across hospitals because of systematic differences in the populations served or the kinds of services provided, resulting in unfair penalties to some types of hospitals.

- Hospitals might, at the time of admission or soon after, be able to identify patients who are more likely to become outliers and either refuse to admit those patients or transfer or discharge them inappropriately.

Given this analysis, three corresponding goals emerged for a PPS outlier payment policy:

- To provide protection against the losses generated by the random occurrence of outlier cases;

- To maintain financial equity among hospitals, by providing for additional payments to defray some of the losses incurred by specific types of hospitals due to the non random occurrence of outlier cases; and

- To avoid creating undesirable admission and transfer incentives for outliers, in order to preserve equity of access to health care for Medicare beneficiaries.

At the same time, since the primary purpose of PPS is to create incentives for efficiency, it was felt that unnecessarily long or expensive stays should not be rewarded. Even when the architects of PPS were designing the outlier policy, it was clear that these goals might not be fully compatible.

The design of the outlier payment policy required that three issues be addressed:

- Development of criteria for identifying outlier cases that would maintain the applicability of the basic PPS rates while factoring out the influence of atypical cases;

- Formulation of an outlier payment mechanism that would preserve the equity of PPS hospital payments and access to care under PPS while avoiding any incentive for unnecessary expenditures on inpatient treatment; and

- Devising of a method of financing the additional payments for outlier cases that would disturb neither the incentives for hospital efficiency nor the equity of payment and access that are the basic goals of PPS.

Each of these issues is discussed below.

Developing a Definition of Outliers

The definition of outlier cases is at once a very simple and a very complex issue. As stated above, payments made under PPS are based on the mean cost per case in each DRG, with individual per case costs distributed around this mean, so that many cases in each DRG will have costs that are lower than the mean, while many others will have costs that are higher than the mean. In this context, cases should be identified as outliers when they have resource requirements that are well beyond the "typical" range for their group.

The specification of objective criteria for the identification of outlier cases, however, requires two types of decisions: first, what measure of resource requirements (e.g., costs, LOS, or some measure of intensity) to use to provide the basis for the outlier criteria; and second, how far from the mean to set the thresholds beyond which cases are to be considered outliers.

Currently, the primary criterion for the identification of outlier cases under PPS is

LOS, since no other measure of resource consumption available at the time of PPS's implementation was felt to be as easy to obtain and reliable to use. However, examination of several alternative methods of identifying outliers based on LOS showed that this measure was inadequate by itself, so an additional criterion for identifying outlier cases was established, based on the adjusted hospital charges for the stay (as an approximation of hospital costs), and applying only to cases that would not qualify as outliers under the LOS criterion.

Given these criteria, the outlier thresholds were set according to the distribution of LOS and adjusted charges in each DRG. The day threshold is the lesser of a fixed number of days or 1.94 standard deviations beyond the geometric mean LOS, and the cost threshold is the greater of a fixed dollar amount beyond the Federal payment rate for the DRG or twice the Federal payment rate.

Formulating a Method of Outlier Payment

In order to protect against undue financial burdens associated with outlier cases, while avoiding the incentive to unnecessarily prolong hospital stays, it was decided that outlier payments to hospitals should be based on the cost of care beyond the outlier threshold. Thus, outlier payments would compensate hospitals for the extra cost of treating an outlier case after the case becomes eligible for such additional payment, with the basic PPS payment rate intended to cover the costs of treatment up to the outlier threshold.

For cases exceeding the LOS threshold (i.e., day outliers), a per diem payment is made for every day beyond the threshold. This per diem is equal to a percentage of the average per diem Federal rate for the DRG. For cases not exceeding the day threshold but exceeding the cost threshold (i.e., cost outliers), the outlier payment is equal to a proportion of the difference between the adjusted charges for the case and the cost threshold for the DRG.

It was determined by the Congress in the original PPS legislation that outlier payments should account for not less than 5 percent and not more than 6 percent of anticipated PPS payments. Thus, a consideration in establishing outlier payment amounts is the trade-off between the level of payment per outlier case and the number of cases that can be included. If limited funds are available for outlier payment (PPS was, after all, instituted to contain the growth of hospital costs), then a high outlier payment rate means that fewer cases can receive such payments.

Devising a Method of Financing Outlier Payments

As described above, the Congress specified that between 5 and 6 percent of anticipated total PPS payments be accounted for by outlier payments. The statute further specified that the basic PPS payment rates be reduced to account for anticipated outlier payments, resulting in total payments comparable to what they would have been in the absence of outlier payments. Thus, outlier payments were financed in a manner analagous to a community-rated insurance policy, with a proportional reduction in the entire structure of the DRG prospective payment rates providing the funds from which outlier payments were made to hospitals that treat such cases.

Implications for Rural Hospitals

The outlier payment structure described above has several implications for rural hospitals. Since one of the objectives of outlier payment is to protect hospitals with a small number of Medicare discharges and since many of those hospitals are located in rural areas, rural hospitals would seem to benefit from such a provision. However, since another objective is to compensate hospitals with a systematic tendency to treat the types of cases that become outliers and since many of those hospitals are large, urban, and teaching hospitals, there would be some tendency for outlier payments to be directed away from rural hospitals. The extent to which these objectives may conflict is a key issue in the analysis described in the remainder of this chapter.

The Implementation of Outlier Payment

The Interim Final Rule for Fiscal Year 1984

HCFA published an interim final rule for the implementation of the first year of the PPS in the Federal Register of September 1, 1983. In this interim final rule, outlier payments for fiscal year 1984 were estimated to account for 5.7 percent of the total PPS payments anticipated for the year. This estimate was based on the following specification of the outlier thresholds:

- Day outliers were defined as discharges subject to prospective payment with an LOS that exceeded the geometric mean LOS for discharges within the same DRG by the lesser of 20 days or 1.94 standard deviations. The first of these criteria was intended to identify cases in the long-stay, resource intensive DRGs, while the second was intended to identify unusually long stays in primarily short-stay DRGs.

- Cost outliers were defined as discharges which did not qualify as day outliers, for which the estimated cost of covered services (i.e., covered charges times a national cost-to-charge ratio of 0.66) exceeded the greater of $12,000, adjusted for hospital area wage differences, or 1.5 times the Federal rate for the DRG. The first of these criteria was intended to identify high cost cases in a general sense, while the second was intended to identify cases that are exceptionally expensive compared to other cases in the same diagnostic group. In addition, hospitals were required to request that cases that qualified as cost outliers be considered for payment under this provision.

The additional payment for day outliers was set equal to 60 percent of the average per diem Federal rate for the DRG for every covered day of care beyond the applicable day threshold, while the additional payment for cost outliers was set equal to 60 percent of the difference between the hospital's adjusted estimated cost for covered services provided during the stay and the applicable cost threshold. The 60 percent rate was selected to represent the marginal cost of the days or costs beyond the thresholds, based upon a review of hospital economic studies.

The additional payment for each outlier case was to be made only after the following conditions were met:

- For day outliers, the appropriate medical review agent (i.e., the Professional Standards Review Organization (PSRO) or the PRO) was required to review and approve the appropriateness of the admission and the number of outlier days and the validity of the diagnostic and procedural coding for the case.

- For cost outliers, upon the hospital's request to the intermediary for the additional

payment (required within 60 days of receipt of the intermediary's initial determination of the prospective payment rate for the discharge), the medical review agent was to review and approve the necessity and appropriateness of all services provided during the stay.

Changes in the Final Rule for Fiscal Year 1984

In the final rule for the implementation of the first year of the PPS, published in the Federal Register of January 3, 1984, the final form of the PPS during its first year was established, including several revisions of the interim final rule. A major revision of the outlier payment policy was the restriction of the additional payment for outlier cases to the Federal portion of the PPS payment rate.

It was decided that, since the hospital-specific portion of the PPS payment rate (75 percent during the first year) was based on the hospital's own historical costs, including its own outlier experience, it would be more appropriate to pay the full hospital-specific rate than to continue to apply the proportionate reduction for outlier payments. Thus, effective with discharges after February 2, 1984 (30 days after publication of the final rule), the full hospital-specific payment rate was restored and the additional outlier payment was applied only to the Federal portion of the PPS payment rate. The estimated amount of outlier payments was set at 5.7 percent of the Federal portion of anticipated basic PPS payments, and only the Federal portion of the PPS payment rate was reduced from what it would have been in the absence of outlier payments.

Changes in Subsequent Years

In the final rule for fiscal year 1985, published in the Federal Register of August 31,

1984, several changes were made which affected the identification of and payment for outlier cases under the PPS:

- In order to increase the basic PPS payment rates, the outlier thresholds were reset so that outlier payments would account for an estimated 5 percent of the Federal portion of total PPS payments, rather than the 5.7 percent figure used in fiscal year 1984. The Federal payment rates would thus be adjusted by a factor of 0.95, rather than the 0.943 adjustment factor used in fiscal year 1984.

- Cases subject to prospective payment were to be considered day outliers if they had an LOS that exceeded the mean LOS for discharges within the same DRG by the lesser of 22 days or 1.94 standard deviations. The previous threshold had been 20 days or 1.94 standard deviations.

- Cases subject to prospective payment were to be considered cost outliers if they did not qualify as day outliers and the adjusted estimated cost of covered services exceeded the greater of 2.0 times the Federal rate for the DRG or $13,000, adjusted for hospital area wage differences. The previous threshold had been 1.5 times the Federal rate or $12,000.

- Eligibility for cost outlier payments was extended to PPS hospitals for cases transferred to another hospital, if those cases had costs exceeding the cost outlier threshold while at the transferring hospital. Cases transferred between hospitals could be considered cost outliers even if they also exceeded the day threshold.

However, transferring hospitals continued to be ineligible for day outlier payments (except as noted below). Previously, transferring hospitals had been ineligible for any outlier payments.

- In addition, transferring hospitals were made eligible for both day and cost outlier payment for cases in DRGs 385 and 456 (transferred neonatal and burn cases), since cases in those DRGs were recognized as likely to involve transfers as an appropriate part of acute care treatment.

These changes took effect on October 1, 1984.

In the final rule for fiscal year 1986, published in the Federal Register of September 3, 1985, several additional changes were made in the PPS outlier policy:

- The day outlier threshold was changed to the lesser of the geometric mean plus 17 days or 1.94 standard deviations, from the previous 22 days or 1.94 standard deviations. This change was based on lower length of stay (LOS) data from fiscal year 1984, rather than the LOS data from calendar year 1981 data that had served as the basis for calculating the thresholds for the previous years. This change compensated for the initial underpayment of outlier cases caused by the unanticipated decline in LOS.

- The cost outlier threshold was changed to the greater of 2.0 times the Federal rate or $13,500, from the previous 2.0 times the Federal rate or $13,000. This change was also based on data from fiscal year 1984, rather than the calendar year 1981 data that had served as the basis for calculating the thresholds for the previous years.

- In addition, it was recommended that the requirement that hospitals request medical review on all cost outliers before receiving payment be eliminated, in consideration of the interference of this process in hospital cash flow, and the relatively low rate of denials (about 5 percent). A sample of cost outlier claims would continue to be reviewed after payment, and the review of a particular hospital's claims could be intensified if it had a pattern of inappropriate billing. Payment for services found to be noncovered or inappropriately billed could be recovered from the hospital. It was also recommended that hospitals be allowed to request outlier payment at the time that the bill was submitted to the intermediary, rather than waiting until the intermediary determined the prospective payment rate for the discharge.

These changes were to take effect on October 1, 1985. However, the Congress, in delaying the transition to the third year of the PPS phase-in period, postponed the effective date of the fiscal year 1986 final rule to May 1, 1986. The PPS transition period was also extended 1 year by the Congress, through fiscal year 1987.

In the final rule for fiscal year 1987, published in the Federal Register of September 3, 1986, no changes were made in the PPS outlier policy. However, in a special rule, published in the Federal Register of November 24, 1986, to implement the provisions of Public Law 99-509 (OBRA 86), a major change was implemented. Instead of the uniform 5 percent reduction in the standardized payment amounts for all hospitals to account for outlier payments, separate reductions were implemented for urban (5.37 percent) and rural (2.18 percent) hospitals, to reflect the difference in outlier payments made to urban and rural hospitals. The legislation specified that this change was to be accomplished without changing the outlier thresholds or the total reduction in the

standardized payment amounts. Thus, the outlier payment policy continued to resemble a community-rated insurance policy, but with urban and rural hospitals treated as separate groups. This change was effective on October 1, 1986. Additional changes were proposed for FY 1988, but, pending further research, were not incorporated in the final rule (see the discussion below).

Aggregate Data on Outlier Cases

Patient-Level Data

The data to be examined in this section are derived from hospital bills submitted to HCFA for payment for discharges during fiscal year 1984. Data from these bills were combined into hospital stay records, resulting in a file containing information on patient characteristics, utilization, charges,and payments for approximately 10.8 million hospital discharges. For the purposes of this analysis, a file was created which contained only those records for which it was indicated that payment was made under PPS. Several hospital characteristics were added to the file, so that the distribution of outliers among classes of hospitals could be examined. The resulting file, containing approximately five million records, was the basis for the descriptive analysis presented in this paper.

In order to reliably identify outlier cases, and to obtain the most complete and accurate per case payment data possible, each of the records in the outlier analysis file was processed through HCFA's PRICER software—a version of the same software used by Medicare's fiscal intermediaries to determine actual payments made on PPS cases. Although these data may not exactly correspond to the actual payment made for each individual case (because of differences in some parameters, for instance number of

interns or beds, used by the intermediaries), they represent our best estimate as to the PPS payment that was due to the hospital for each case.

Outlier Payments as a Percentage of Total PPS Payments

The hospital bill data file described above is used here to examine the number of cases qualifying for outlier payment and the amount of outlier payments that were made during fiscal year 1984, the first year of PPS. Although the changes made in subsequent years may affect these figures, the use of first-year data provides a baseline for the analysis of the effects of the outlier payment policy.

Anticipated outlier payments for fiscal year 1984 consist of two components:

- For PPS discharges between October 1, 1983 and February 2, 1984, outlier payments were anticipated to be approximately 5.7 percent of total basic PPS payments, as published in the interim final rule; and

- For PPS discharges between February 3, 1984 and September 30, 1984, outlier payments were anticipated to be only 25 percent of the prior percentage, or approximately 1.4 percent of total basic PPS payments, since the final rule restricted outlier payments to apply only to the Federal portion of the PPS payment.

Applying these percentages to the estimated PPS payments made during the two time periods specified above, anticipated outlier payments during fiscal year 1984 would have been 2.19 percent of total basic PPS payments, with day outliers accounting for 1.86 percent and cost outliers 0.33 percent.

Table 2.1 compares estimated actual outlier payments for PPS discharges during fiscal year 1984 with the anticipated payments described above. According to this table, the actual outlier payment amount was equal to 1.17 percent of total basic PPS payments for the year, with day outliers accounting for 0.74 percent and cost outliers accounting for 0.43 percent. These figures would seem to indicate that outlier payments overall and payments for day outliers in particular were substantially lower than anticipated, while payments for cost outliers were somewhat higher than anticipated.

The apparent discrepancy between actual and anticipated outlier payments may be related to the following factors:

- As stated above, the definitions of outlier thresholds and anticipated outlier payments were based on data from hospital stays during 1981. These data did not reflect the steep decline in ALOS that took place under the PPS. For this reason, the percentage of cases that actually qualified as day outliers during fiscal year 1984 (1.76 percent) was far less than originally projected (4.4 percent).

- The percentage of cases qualifying as cost outliers during fiscal year 1984 (1.21 percent), however, was greater than the original projection (1.0 percent).

- Finally, a comparison of actual and projected outlier payments per outlier case shows that the actual payment was approximately equal to what was projected, both for day and cost outliers.

This analysis thus indicates that the discrepancy between actual and anticipated outlier payments is largely due to the rapid decline in LOS in recent years. Fewer cases

qualified as day outliers than was anticipated, but the outlier payment per case appears to have been equal to what was projected. For cost outliers, however, it appears that the actual percentage of cases was greater than originally anticipated, while the outlier payment per case was about equal to the projected amount. With the resetting of outlier thresholds based on fiscal year 1984 hospital stays beginning in fiscal year 1986 (delayed to May 1, 1986), the decline in LOS will be shown to have been adequately incorporated, and actual outlier payments should thus be much closer to the anticipated amounts.

Other Aggregate Data

In Table 2.2, several aggregate indicators are presented which describe the proportion of discharges, hospital days, charges, and payments accounted for by day outliers and cost outliers. Table 2.3 presents essentially the same indicators on a per case basis. Data in these tables and all remaining tables in this chapter are case-weighted.

Before attempting to interpret these data, a few caveats must be mentioned. First, it must be emphasized again that the designation of outliers and the calculation of PPS payments was based on the output of HCFA's PRICER software, which may not correspond exactly (although they should be very similar) to the actual designations and payments determined by the intermediaries in individual cases. Second, the payment figure represents the entire payment to which the hospital was due under the PPS (including any applicable deductible or coinsurance payments by the beneficiary), but not necessarily the actual amount received from HCFA, the beneficiary, or other third-party payers. Third, it must be stressed that, although we have used the difference between charges and payment to represent, in some sense, the extent of the financial

burden imposed by outlier cases, the true indicator of this financial burden is the difference between costs and payments. Data on charges may be misleading as an indicator of costs, because the relationship between costs and charges varies considerably across hospitals; these data may be particularly misleading for outlier cases, since marginal charges for additional days in the hospital may considerably overstate marginal costs for lengthy stays.

Table 2.2 shows that, as previously discussed, day outliers accounted for 1.76 percent of all PPS discharges during fiscal year 1984, substantially lower than the 4.4 percent initially projected by HCFA. Cost outliers accounted for 1.21 percent of all PPS discharges, which, as stated above, was somewhat higher than the pre-PPS projection of 1.0 percent. The two outlier categories combined thus accounted for 2.96 percent of all PPS discharges, barely over half of the projected 5.4 percent of all PPS cases.

Table 2.2 also shows that the percentage of PPS hospital days accounted for by outliers was greater than the percentage of discharges, and the percentage of total charges was greater still (that is, outliers have longer stays and much higher charges than other PPS cases, as shown in Table 2.3). This is as would be expected, since the very reason for the development of an outlier payment policy was to identify cases which have exceptional resource requirements.

Although outliers accounted for a greater than proportional share of payments, this share was not as great as their share of charges. Again, it is not surprising that payments cover a lower percentage of charges for outlier cases than for other PPS cases, because of the way that the outlier payment policy was designed. Before the outlier threshold is exceeded by any case, any losses from the case are meant to be balanced against the profits from cases which have lower than average resource

requirements. The outlier payment policy is meant to protect the hospital from suffering extreme losses due to atypical cases, but not to make these cases profitable.

Table 2.3 also contains some data on hospital charges per day by outlier category. These data show that average charges per day for day outliers are slightly higher than for non outlier cases, and that these charges are made up of a higher proportion of special care charges. Cost outliers, not surprisingly, have very much higher charges per day than do either day outliers or non outliers, with a much higher share of special care charges. This reflects the intention that cost outlier payments be restricted to cases requiring exceptionally intensive care.

The Impact of Outlier Payment by Hospital Group

Hospital-Level Data

In this section, data on the distribution of outlier cases and the impact of the outlier payment policy by selected hospital characteristics are described. These data were obtained from the hospital bill files described above (aggregated to the hospital level), as well as the Medicare cost reports submitted by each hospital for its first year under PPS. In addition, the redistributive impact of the outlier payment policy is estimated using the PPS Impact simulation model developed by HCFA's Office of Research and Demonstrations to analyze the impact of alternative hospital payment policies and provisions.

The concentration of outlier cases at particular types of hospitals would indicate whether the risk being borne under prospective payment is evenly distributed, or

whether some adjustment or redesign of the outlier payment policy may be required. The redistributive impact of the outlier payment policy is also important, since it provides a measure of the success of this policy in protecting hospitals against the financial hardship that exceptionally long and/or expensive stays can impose, especially for small hospitals that are not protected by the "law of large numbers," as described earlier in this chapter. The hospital characteristics examined below are Medicare hospital group (a combination of location and bed size), census division, teaching status, and ownership.

Distribution of Outlier Cases

Table 2.4 shows the distribution of outlier cases by hospital group. As discussed above, day outliers comprised about 1.8 percent of all PPS cases, and cost outliers about 1.2 percent, for a total of about 3.0 percent. As this table shows, outliers were not evenly distributed among hospital groups: urban hospitals had more than twice as many outlier cases as did rural hospitals, and large hospitals had more outliers than did small hospitals; teaching hospitals were much more likely to have outlier cases than were non teaching hospitals, and proprietary hospitals had a somewhat higher overall proportion of outliers than did not-for-profit or Government hospitals. In addition, hospitals in the West North Central and West South Central regions, as well as hospitals in the Mountain region, had a relatively small percentage of outlier cases.

Table 2.4 also shows that the distribution of outliers by type was far from uniform: day outliers appear to be much more strongly correlated with size than do cost outliers, and

the same is true for teaching status; the percentage of cost outliers at proprietary hospitals, however, was almost twice as high as for either of the other ownership groups, probably due to the high charge structures at these hospitals. Although the overall percentage of outliers varied relatively slightly across most regions, there were extreme differences by outlier type: for instance, while hospitals in the New England and Pacific regions had about the same overall percentage of outliers (3.42 and 3.25, respectively), about 81 percent of the outliers in New England were day outliers, but 59 percent of the outliers in the Pacific were cost outliers. This latter finding was as expected; in fact, the development of the cost outlier criterion was intended to equalize outlier payments for the east--where hospital stays tend to be longer--and the west--where hospital stays tend to be shorter, but more intensive.

Redistributive Effect of Outlier Payment

Table 2.5 describes the redistributive effect of the PPS outlier payment policy, given the actual amount of outlier payments reported by each PPS hospital during its first cost reporting period under PPS. That is, the comparison in this table is between the actual amount of PPS payments received by hospitals in each group and the amount that they would have received if there had been no outlier payment amounts and instead the basic PPS payment rates had been proportionately higher. These data are based on the Medicare hospital cost reports submitted by 4,544 PPS hospitals.

The results presented in Table 2.5 indicate that the outlier payment policy had relatively little effect on the distribution of PPS payments by hospital group.[1] There, however, appears to have been a redistribution of payments away from small (and rural) hospitals and non teaching hospitals and toward large (and urban) hospitals and teaching hospitals. Hospitals in New England, which have the longest ALOS, also appear to have benefitted from the outlier payment policy in effect during the first year of PPS.

Table 2.6 shows the effect of the pre-OBRA 86 outlier payment policy on the distribution of hospital operating margins on PPS discharges during each hospital's first cost reporting period under prospective payment. If the then-existing policy does, in fact, serve to insure against exceptional losses, the actual percentage of hospitals with negative PPS operating margins should be less than would have been the case with no outlier policy. The data in Table 2.6 indicate that the percentage of hospitals with negative PPS operating margins was about the same (slightly higher, in fact) under the existing payment system as it would have been with no outlier payment policy (assuming the same overall level of payment).

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[1]It should be noted that the outlier payment policy applies only to the Federal portion of the PPS payment, which, in fiscal year 1984, comprised only 25 percent of the total. In each succeeding year, the Federal portion—and thus the outlier payment—will comprise an increasing part of the total PPS payment.

Provisions of OBRA 86

As discussed above, the outlier payment policy originally implemented under PPS resembled a community-rated insurance policy, with all PPS hospitals included as a group. That is, the percentage reduction in the PPS payment rates, which serves as the "premium" for the "insurance" provided by outlier payment, is the same for all hospitals (urban and rural, large and small, teaching and non teaching). However, as shown by the data presented above, the incidence of outlier cases and the distribution of outlier payments are not uniform across hospital groups. In particular, outlier cases and payments are concentrated in large, urban, and teaching hospitals at the expense of small, rural, and non teaching hospitals.

OBRA 86 required that, effective on October 1, 1986, the calculation of the PPS payment rates should incorporate separate adjustments for urban and for rural hospitals, to account for the difference in the incidence of outlier cases and payments.

Also, the original process of calculating the PPS payment rates involved taking a simple average of the standardized costs for each hospital, with no adjustment made for the number of cases treated by or the size of each hospital. As a result of the more unequal distribution of cases across rural hospitals, the resulting hospital-weighted rates tended to disadvantage rural hospitals relative to urban hospitals.

OBRA 86 required that the payment rates for urban and rural hospitals be based on case-weighted, rather than hospital-weighted, averages effective on October 1, 1987.

This change will account for the number of cases treated at individual hospitals of each type, rather than treating every hospital with equal weight, with the effect that high volume, higher cost hospitals will be more accurately reflected in the rates. Implemented budget neutrally, this provision had the effect of increasing the payment rates for rural hospitals more than those for urban hospitals and decreasing the payment differential between the two sets of rates.

Impact

The financial impact of these two technical refinements to the PPS rate-setting process is described in Table 2.7. These data were obtained from HCFA's PPS Impact simulation model and based on comparisons between projected Medicare operating margins for fiscal year 1988 (the fully implemented PPS with national urban and rural payment rates) using the system that was in place before the passage of OBRA 86 and under a system that incorporates all of the changes specified in OBRA 86. In these simulations, New York and Massachusetts were included.

As Table 2.7 shows, the pre-OBRA 86 system would have resulted in a large disparity between Medicare operating margins for urban and rural hospitals (13.8 percent versus 6.7 percent) with fully national payment rates; however, the incorporation of all of the OBRA 86 changes reduces this disparity (12.8 percent versus 11.9 percent). Thus, Medicare operating margins for urban and rural hospitals should be more equal in the years subsequent to the implementation of the OBRA 86 changes.

Table 2.7 also shows that the projection of Medicare operating margins by hospital size under the pre-OBRA 86 system is not changed by the new provisions. For both urban

and rural hospitals, the largest margins are projected for the smallest hospitals. Medicare operating margins are projected to be relatively large for major teaching hospitals under both systems, as well.

Summary and Conclusions

As described in this chapter, the outlier payment policy was implemented to protect hospitals from the risk of financial loss due to the random occurrence of exceptionally costly cases and to compensate some types of hospitals for losses due to their systematic tendency to treat cases that are more costly than average for a given DRG. It was recognized that these objectives might have conflicting effects.

Data for the first year of PPS show that outlier payments were less than projected due to the steep decline in ALOS under prospective payment. However, the use of data from the period after the implementation of PPS, beginning in fiscal year 1986, should alleviate much of this problem.

Given the shortfall in outlier payments, the distributive effects of these payments seem to be minor. However, to the extent that any effect is observed, it appears to have been in favor of large, urban, and teaching hospitals, at the expense of small, rural, and non-teaching hospitals.

The changes in the PPS payment methodology mandated by OBRA 86 are found to have a considerable effect on the distribution of Medicare operating margins. The OBRA 86 provisions decrease the disparity between projected FY 1988 margins for urban and

rural hospitals by almost 80 percent, indicating increased equality between urban and rural hospitals beyond FY 1986.

Moreover, a number of changes are being considered in the outlier payment policy for fiscal year 1989 and beyond. On June 10, 1987, we issued a Federal Register notice including two proposed changes to outlier regulations. First, if a day outlier case also meets the cost outlier criteria, we proposed that it be paid using the cost outlier methodology. We also proposed increasing the marginal cost rate paid cost outlier cases from 60 percent to 80 percent. These changes were meant to improve equity in payment for the most costly cases. Table 8 summarizes the expected impact of the proposed changes upon PPS payments. While these changes were not specifically directed at reducing the risk for small and rural hospitals, it was anticipated that they would have the effect of reducing the overall risk imposed by outliers, by improving the correlation between case-specific costs and PPS payment for extreme cases. On September 1, 1987, we published a final regulation in the Federal Register stating that based upon public comments we would continue with the current outlier policy until we complete our analysis.

In particular, we are developing a methodology for calculating hospital-specific cost-to-charge ratios for use in adjusting charges to costs for comparison with the cost outlier threshold. This should allow for more accurate identification and payment of exceptionally costly cases, by taking into account the wide variation in the relationship between costs and charges for individual hospitals.

Table 2.1

ACTUAL VS. ANTICIPATED PPS OUTLIER PAYMENTS
FY 1984

	Actual	Anticipated
Total outlier payments:		
o as a percentage of total basic PPS payments	1.17 percent	2.19 percent
o outlier payments per outlier case	$ 1,317	$ 1,351
Length of stay outlier payments:		
o as a percentage of total basic PPS payments	0.74 percent	1.86 percent
o outlier payments per outlier case	$ 1,404	$ 1,410
Cost outlier payments:		
o as a percentage of total basic PPS payments	0.43 percent	0.33 percent
o outlier payments per outlier case	$ 1,191	$ 1,095

Source: Health Care Financing Administration, Office of Research and Demonstrations.

Table 2.2

AGGREGATE DATA ON THE DISTRIBUTION OF OUTLIER CASES, DAYS, CHARGES, AND REIMBURSEMENTS

Indicator	Percentage Accounted for by Outlier Cases: Length of Stay	Cost	Total
PPS Discharges	1.76	1.21	2.96
Hospital Days	9.17	3.34	12.51
Total Charges	10.49	7.17	17.66
Total Reimbursements	3.35	3.00	6.35

Source: Health Care Financing Administration, Office of Research and Demonstrations.

Table 2.3

AGGREGATE DATA ON
DAYS, CHARGES, AND REIMBURSEMENTS PER CASE
BY OUTLIER CODE

Indicator	Average per Case by Outlier Code: Non Outliers	Length of Stay Outliers	Cost Outliers	All PPS Stays
Avg. Length of Stay	7.1	40.9	21.7	7.8
Avg. Charges	$ 3,714	$ 26,151	$ 26,012	$ 4,377
Charges per Day	$ 526	$ 639	$ 1,200	$ 559
Special Care Charges as a Percentage of Total Charges	6.36%	10.10%	14.20%	7.32%
Avg. Reimbursements	$ 3,262	$ 6,457	$ 8,399	$ 3,380
Avg. Charges less Reimbursements	$ 452	$ 19,694	$ 17,613	$ 996

Source: Health Care Financing Administration, Office of Research and Demonstrations.

Table 2.4

DISTRIBUTION OF OUTLIER CASES BY HOSPITAL GROUP
FY 1984

Hospital Group	Outliers as a Percentage of PPS Cases: Length of Stay Outliers	Cost Outliers	Total Outliers
All Hospitals	1.76%	1.21%	2.96%
Urban	2.07	1.45	3.53
o <100 beds	0.93	0.92	1.85
o 100-404 beds	1.78	1.59	3.37
o 405-684 beds	2.59	1.39	3.98
o 685+ beds	3.04	1.23	4.27
Rural	0.98	0.60	1.58
o <100 beds	0.64	0.40	1.04
o 100-169 beds	0.97	0.68	1.65
o 170+ beds	1.61	0.87	2.47
New England	2.84	0.59	3.42
Mid-Atlantic	2.05	1.38	3.44
South Atlantic	1.90	1.45	3.35
East North Central	2.10	0.84	2.94
East South Central	1.72	1.22	2.95
West North Central	1.48	0.91	2.39
West South Central	1.32	1.02	2.34
Mountain	1.16	1.40	2.56
Pacific	1.33	1.92	3.25
Major Teaching	3.39	1.15	4.54
Other Teaching	2.46	1.26	3.71
Non-Teaching	1.34	1.19	2.53
Not-for-Profit	1.89	1.15	3.04
Proprietary	1.33	2.20	3.53
Government	1.47	0.86	2.33

Source: Health Care Financing Administration, Office of Research and Demonstrations.

Table 2.5

ESTIMATED REDISTRIBUTIVE EFFECT OF PPS OUTLIER PAYMENT POLICY
HOSPITALS' 1984 COST REPORTING PERIODS

Hospital Group	PPS Payments Per Case: Actual	W/No Outlier Policy[a]	Percent Difference
All Hospitals	$ 3,508	$ 3,508	0.0%
Urban	3,985	3,982	+0.1
o <100 beds	2,994	3,004	-0.3
o 100-404 beds	3,785	3,787	-0.1
o 405-684 beds	4,386	4,375	+0.3
o 685+ beds	5,106	5,084	+0.4
Rural	2,221	2,228	-0.3
o <100 beds	1,986	1,997	-0.6
o 100-169 beds	2,289	2,298	-0.4
o 170+ beds	2,602	2,600	+0.1
New England	3,623	3,592	+0.9
Mid-Atlantic	3,986	3,995	-0.2
South Atlantic	3,206	3,196	+0.3
East North Central	3,832	3,831	+0.0
East South Central	2,722	2,723	-0.0
West North Central	3,176	3,184	-0.3
West South Central	3,048	3,054	-0.2
Mountain	3,506	3,515	-0.3
Pacific	4,442	4,444	-0.0
Major Teaching	5,970	5,949	+0.4
Other Teaching	4,187	4,183	+0.1
Non-Teaching	2,964	2,967	-0.1
Not-for-Profit	3,677	3,677	0.0
Proprietary	3,283	3,277	+0.2
Government	2,938	2,940	-0.1

[a]Assuming no change in the total amount of PPS payments.

Source: Health Care Financing Administration, Office of Research and Demonstrations.

Table 2.6

ESTIMATED EFFECT OF PPS OUTLIER PAYMENT POLICY
ON DISTRIBUTION OF HOSPITAL OPERATING MARGINS FOR PPS CASES
HOSPITALS' 1984 COST REPORTING PERIODS

	Percent of Hospitals with PPS Operating Margins:			
	Actual		W/No Outlier Policy[a]	
Hospital Group	Less Than 0	Less Than -20%	Less Than 0	Less Than -20%
All Hospitals	19.5%	3.0%	18.9%	2.9%
Urban	9.7	1.4	9.7	1.4
o <100 beds	18.5	4.2	17.3	4.2
o 100-404 beds	7.8	0.6	8.3	0.6
o 405-684 beds	2.9	0.0	3.3	0.0
o 685+ beds	0.0	0.0	0.0	0.0
Rural	28.8	4.5	27.6	4.3
o <100 beds	31.2	5.5	29.9	5.3
o 100-169 beds	21.9	1.1	21.3	0.8
o 170+ beds	18.3	1.1	17.7	1.1
New England	12.3	0.9	13.2	0.9
Mid-Atlantic	6.3	1.0	5.7	1.0
South Atlantic	16.2	2.3	16.3	2.4
East North Central	14.4	0.6	13.9	0.6
East South Central	24.7	2.3	24.3	2.5
West North Central	23.4	3.8	22.8	3.6
West South Central	25.6	6.4	24.2	5.8
Mountain	27.2	5.6	25.6	5.0
Pacific	15.3	2.3	14.9	2.3
Major Teaching	4.1	0.0	4.1	0.0
Other Teaching	5.5	0.5	5.9	0.5
Non-Teaching	22.4	3.5	21.6	3.4
Not-for-Profit	16.7	2.2	16.2	2.0
Proprietary	18.8	2.8	17.9	2.8
Government	25.9	5.0	25.3	4.8

[a]Assuming no change in the total amount of PPS payments.

Source: Health Care Financing Administration, Office of Research and Demonstrations.

Table 2.7

ESTIMATED MEDIACRE OPERATING MARGINS BY HOSPITAL GROUP
UNDER ALTERNATIVE PPS PAYMENT RULES

Hospital Group	First Year of PPS	Pre-OBRA86 100 Percent National Rates	Current System 100 Percent National Rates
All Hospitals	16.4%	12.6%	12.6%
Urban	18.2	13.8	12.8
o <100 beds	14.2	19.0	17.9
o 100-404 beds	16.9	13.0	11.9
o 405-684 beds	20.0	14.1	13.0
o 685+ beds	23.0	15.2	14.1
Rural	8.6	6.7	11.9
o <100 beds	8.3	8.4	14.5
o 100-169 beds	8.4	2.7	8.4
o 170+ beds	9.3	8.0	11.3
Major Teaching	23.3	16.3	15.3
Other Teaching	19.4	13.4	12.5
Non-Teaching	13.4	11.4	12.2

Source: Health Care Financing Administration, Office of Research and Demonstrations.

Table 2.8

Estimated Impact on PPS Payments of Proposed Changes in Outlier Payment for FY 1988

Hospital Group	Average FY 1987 Payment Per Case	Effect of Proposed Outlier Change[a/]
All Hospitals	$4,007	0.2
Urban by Region		
New England	4,671	-1.0
Mid Atlantic	4,845	-1.7
South Atlantic	3,975	0.8
East North Central	4,641	0.2
East South Central	3,680	0.8
West North Central	4,494	0.5
West South Central	3,996	0.7
Mountain	4,423	1.2
Pacific	5,061	1.2
Rural by Region		
New England	3,311	-0.2
Mid Atlantic	3,052	-0.8
South Atlantic	2,548	0.2
East North Central	2,757	0.1
East South Central	2,211	0.3
West North Central	2,477	0.2
West South Central	2,314	0.3
Mountain	2,748	0.3
Pacific	3,243	0.6
Urban Hospitals	4,470	0.2
0-99 Beds	3,502	0.5
100-404 Beds	4,220	0.5
405-684 Beds	4,892	0.2
685 + Beds	5,760	1.5
Rural Hospitals	2,585	0.1
0-99 Beds	2,297	0.0
100-169 Beds	2,630	0.3
170 + Beds	3,058	0.1

Table 2.8(cont.)

Hospital Group	Average FY 1987 Payment Per Case	Effect of Proposed Outlier Change[a/]
Teaching Status		
Non-Teaching	3,417	0.5
Resident/Bed Ratio		
Less than 0.25	4,631	0.1
Resident/Bed Ratio		
0.25 or Greater	6,792	-1.0
Type of Ownership		
Voluntary	4,167	0.0
Proprietary	3,638	1.8
Government	3,518	-0.2

a/ This column compares payments incorporating the proposed FY 1988 changes (published June 10, 1987 as a NPRM but not incorporated into the final rule) with estimated payments based on parameters published in the Federal Register September 3, 1986 (51 FR 42229). That is, the comparison is not of simulated FY 1988 rates with FY 1987 rates, but of two sets of FY 1987 rates differing only in the incorporation of the change specified in the column title.

SOURCE: HCFA, Office of Research and Demonstrations

Part Three: Impact of PPS Transfer Policy on Rural Hospitals

Inpatient hospital transfers occur with sufficient frequency that a specific policy for reimbursing hospitals that send and receive transfer cases was thought to be necessary under the Medicare prospective payment system (PPS). When patients are transferred between hospitals receiving payment under the PPS, full payment is made to the final hospital from which the patient is released. The transferring hospital is paid a per diem for each day of the hospital stay. The underlying rationale for this policy was that the final discharging hospital generally provides the greatest portion of the patient's treatment, whereas the transferring hospital generally provides a limited amount of treatment to the transferred patient.

In this chapter, we describe the results of an analysis undertaken to examine the specific issue of inpatient hospital transfers and the impact of the PPS transfer payment policy on rural hospitals. Section one of this chapter describes the data used to conduct the analysis. Transfer patterns by type of facility are presented and discussed in section two. In section three, we evaluate the relationship between PPS payments for transfer cases and hospital costs associated with transfer cases. The final section contains a summary discussion of the research findings. A series of tables completes this part.

Transfer Data

The transfer variables included in this analysis were generated from the Federal

fiscal year 1984 PATBILL file. The file contains information by discharge for all Medicare inpatient stays, including detailed charge and LOS data, relevant diagnostic and procedure codes, and selected demographic characteristics such as age and sex of beneficiary. Of the over 10.8 million inpatient stays reported by short-term general hospitals during Federal fiscal year 1984, there were .2 million which indicated a date of discharge from one hospital that was equal to the date of admission to another hospital for the same Medicare beneficiary. For this review these cases were assumed to be transfer cases and were merged into a single episode of inpatient hospital care. Multiple transfers were also identified, in which case the same patient may have been transferred more than once within the same inpatient episode of care. The distribution of 10.6 million Medicare hospital inpatient episodes by number of transfers per episode is displayed in Table 3.1. Some of the more common patterns of transfers in multiple transfer episodes are displayed in Table 3.2.

Almost 2 percent of FY 1984 inpatient episodes in short-term general hospitals involved a transfer. However, some kind of cases were more likely to be transferred than others. As indicated in Table 3.3, the most commonly transferred cases were in major diagnostic category (MDC) 5, Diseases and Disorders of the Circulatory System. Angina pectoris (DRG 140), specific cerebrovascular disorders excluding transient ischemic attacks (DRG 14), and circulatory disorders with acute myocardial infarction (DRG 122) alone accounted for 20 percent of all transfers and had a relatively large percentage of their cases transferred to another inpatient facility.

From the perspective of the hospitals receiving the transfer cases, the MDC with

the most transfer cases was also MDC 5, Diseases and Disorders of the Circulatory System. However, as indicated in Table 3.4, the DRG assignment of the receiving hospital tended to differ from the DRG assignment of the sending hospital. Coronary bypasses (DRGs 106 and 107) and circulatory disorders involving cardiac catheterization procedures (DRG 125) were among the more frequent referral cases for receiving hospitals, in both absolute and relative terms. In fact, in only 18 percent of single transfer episodes were identical DRGs assigned by both the sending and receiving hospitals. Identical MDC assignment occurred in 57 percent of all single transfer episodes.

The findings presented in Tables 3.3 and 3.4 indicate that, for a given transfer episode, the sending hospital is more likely to provide treatment resulting in assignment to a medical DRG (e.g., DRG 122 and DRG 140). The receiving hospital is more likely to perform more complex procedures resulting in assignment to a surgical DRG (e.g., DRG 106 and DRG 107). Transfers of certain types of cases, although small in absolute number, represent a large percentage of the total number of cases, as indicated in Table 3.4. Examples include: craniotomies (DRG 1); radiotherapy (DRG 409); cardiac valve procedures (DRG 105); and other cardiothoracic procedures (DRG 108).

Transfer Activity By Type of Hospital

The number and percent of transfers into and out of a given inpatient facility were generated for each of the 5,820 short-term general hospitals reporting a Medicare inpatient stay in the 1984 PATBILL file. The average hospital transferred approximately 35 out of 1,864 Medicare inpatient beneficiaries to another inpatient facility for further treatment. This represented approximately 1.9 percent of the

average number of Medicare patients treated in a short term general hospital in FY 1984. Of the single transfer episodes, 87 percent represented transfers to urban hospitals and 61 percent represented transfers to teaching hospitals.

Transfer activity by urban/rural status within each region is displayed in Table 3.5. A hospital is considered to be in an urban area if it is located in a metropolitan statistical area (MSA) as defined by the Executive Office of Management and Budget or in the New England County Metropolitan Area (NECMA); otherwise it is designated as a rural hospital. In all regions, rural hospitals transferred a larger percentage of their cases than their urban counterparts. Rural hospitals also received a smaller percentage of their cases as transfers than did urban facilities. Overall, rural hospitals received approximately 1.2 percent of their Medicare cases as transfers, and sent approximately 3.3 of their cases to another facility. The final column of Table 3.5 displays the net percent of transfer cases, which is defined as the difference between the number of transfers received and the number of transfers sent, divided by the total number of Medicare cases. For rural hospitals, the net percent of transfer cases was -2.1 in FY 1984. Urban hospitals, on the other hand, received approximately 2.1 percent of their Medicare cases as transfers, and sent approximately 1.4 percent of their cases to another facility, yielding a net percent of 0.7.

Further analyses of urban/rural transfer patterns found that rural hospitals transferred approximately 78 percent of their transfer cases to an urban hospital, with the remainder transferred to another rural facility. Urban hospitals, on the other hand, transferred fewer than 6 percent of their transfer cases to rural hospitals. The vast majority of their cases were transferred to another urban

facility. As indicated in Table 3.5, rural hospitals in the east south central, west north central, and west south central regions sent the largest percentage of their cases to another facility for additional treatment. As a result, urban hospitals in these same regions received the largest percentage of their cases as transfers. Hospitals located on the east and west coasts tended to transfer smaller percentages of their Medicare cases, although the same pattern of transfers across urban and rural facilities was observed.

A more detailed breakdown of urban/rural transfer patterns is provided in Table 3.6. Urban hospitals, in this table, are classified into one of three categories: urban core; suburban ring; and other metropolitan area. Hospitals located within the political boundaries of the 100 largest cities in the U.S. represent the urban core. Hospitals located within the same MSA, but not in the urban core, represent the suburban ring. Hospitals located in a MSA that does not include one of the 100 largest cities are classified as other metropolitan area. Rural hospitals are further classified into one of two categories: adjacent to a MSA; and nonadjacent to a MSA, based on the county in which the hospital is located.

The pattern of transfers by type of urban hospital is as expected. Hospitals located within the urban core received the largest percentage of their Medicare cases as transfers and sent the smallest percentage of their cases to another inpatient facility. Hospitals located within the suburban ring exhibited the opposite pattern, transferring the largest percentage of Medicare cases to another inpatient facility, and receiving the smallest percentage of their cases as transfers. Hospitals located in other metropolitan areas fall roughly halfway between these two extremes.

Transfer patterns for rural hospitals adjacent to a MSA are not very different than the patterns observed for rural hospitals nonadjacent to a MSA. Both types of facilities receive approximately 1 percent of their cases as transfers and send approximately 3 percent of their cases to another inpatient facility. However, more definitive patterns emerge for two other categories of rural hospitals that have been created for Medicare PPS: sole community hospitals; and rural referral centers.

Sole community hospitals must meet certain location criteria to establish that they are the sole source of inpatient hospital services reasonably available to individuals in a geographic area who are entitled to Part A Medicare benefits. Hospitals that are classified as sole community hospitals may receive 75 percent of their PPS payments on a hospital specific basis indefinitely, whereas other PPS hospitals will be phased into a fully Federal payment system. Approximately 350 hospitals have been designated as sole community hospitals for purposes of Medicare PPS. Rural referral centers, on the other hand, must meet or exceed certain case mix and discharge criteria to establish that they are more comparable to urban acute care facilities than to typical rural hospitals. Hospitals designated as rural referral centers receive the urban rather than rural payment rate under Medicare PPS for as long as they continue to meet the criteria. There are approximately 150 facilities that have been designated as rural referral centers for purposes of the Medicare prospective payment system.

As indicated in Table 3.6, sole community hospitals tend to have fewer Medicare discharges than other rural facilities, but transfer a larger percentage of their Medicare cases to another facility for further treatment. In contrast, rural

referral centers have more than three times the average number of Medicare cases than other rural hospitals. They also receive approximately 2.5 percent of their cases as transfers and send 1.6 percent of their cases to another facility, yielding a net transfer percent of 0.9. In terms of their transfer patterns, rural referral centers more closely resemble urban core or other metropolitan hospitals than they resemble suburban ring or rural hospitals.

Table 3.7 displays information on transfer patterns for hospitals categorized according to their size and extent of teaching activity. The three categories of teaching activity are defined as follows. Hospitals with no interns and residents on staff are classified as nonteaching hospitals. Hospitals with resident-to-bed ratios that are greater than 0 but less than 0.25 represent the "light" teaching category. Hospitals with resident-to-bed ratios greater than 0.25 are classified in the "heavy" teaching category. The transfer patterns exhibited in Table 3.7 are as expected. The percent of cases received as transfers increases with both bed-size and teaching activity, whereas the percent of cases transferred to another facility decreases with both bed-size and teaching. Rural hospitals with less than 100 beds on average received only 0.9 percent of their cases as transfers from other hospitals, and sent 4.5 percent of their cases to another facility for treatment.

Cost of Transfer Cases

Approximately 92 percent of the transfer cases involved a single transfer between two hospitals. In this section we focus our analysis on the charges and LOS of the 30 most frequently occurring DRGs involving a single transfer. This represents over 61 percent of the single transfer episodes. The information extracted for the

mean LOS and charges for the 30 most frequently occurring DRGs was compared to the mean LOS and charges for hospital episodes in which no transfer took place.

In only a small proportion of the single transfer episodes (18.7 percent) is the DRG assignment identical in the sending hospital and the receiving hospital. Of the 81.3 percent of the episodes with different DRGs, the relative weight of the DRG in the receiving hospital is higher than that of the sending hospital in nearly 70 percent of the transfers.

Of the 18.7 percent, or nearly 33,000 episodes, in which the DRG assignment is identical in the sending and the receiving hospital, these episodes as a class represent atypically expensive cases. The combined ALOS for the transfer episodes is longer in all 30 of the most frequently occurring DRGs in the transfer file than the ALOS for all non-transfer cases in the universe. (Table 3.8(a), columns 3 and 4). In fact, the ALOS of transfer cases in the receiving hospital is longer than the ALOS for the non-transfer cases in the universe for 24 of the 30 most frequently occurring DRGs in the transfer file. (Table 3.8(a), columns 2 and 4). The combined average charges for all 30 of the most frequently occurring DRGs are higher for the transfer episodes than for the non-transfer cases in the universe. (Table 3.9(a), columns, 3 and 4). Again, the average charges for transfer cases in the receiving hospital alone exceed the average charges for all non-transfer Medicare cases in 29 of the 30 most frequently occurring DRGs (Table 3.9(a), columns 3 and 4).

The magnitude of the differences in the combined ALOS and charges between the transfer cases and the non-transfer cases suggests that many of the transfer episodes, had they been treated in a single hospital, would have qualified for outlier

payments. For example, the combined ALOS meets or exceeds the day outlier threshold for 6 of the 30 most common DRGs. Similarly, the combined average charges exceed the cost outlier threshold for 5 of the 30 most common DRGs.

In 17 of the 30 most frequent DRGs, the ALOS in the sending hospital exceeds the geometric mean LOS for the universe. This means that all cases at or above the average for those 17 DRGs are paid at twice the full DRG amount (once to the sending hospital, once to the receiving hospital) plus any outlier amounts due. In contrast, only 6 of the 30 most frequent DRGs had charges for the sending hospital which exceeded the average for a single hospital episode. Similar patterns are observed for the single transfer episodes with different DRGs reported by the sending and receiving hospitals (Tables 3.8(b) and 3.9(b)), and for all single transfer episodes (Tables 3.8(c) and 3.9(c)).

However, for sending hospitals receiving a per diem amount less than the full DRG because the transfer occurred prior to that DRG's geometric mean length-of-stay, concern has been expressed that they are receiving inadequate reimbursement. This concern stems from the fact that the first few days of hospitalization are generally the most cost-intensive, and an average per diem amount based on the ALOS for each DRG may not sufficiently cover these high front-end costs. Analysis indicates this is not the case, however. Table 3.10 breaks down the ratio of reimbursements to total charges in the sending hospital by length-of-stay for transfer cases in fiscal year 1984 where the sending hospital is covered under PPS. The ratios are actually highest for the shortest LOSs and decline as the LOS increases. Furthermore, the ratios for LOSs up to 3 days exceed that for all PPS inpatient stays in fiscal year 1984 (.693). As the LOS reaches 10 days and beyond,

however, the ratio falls substantially below .693. This was largely due to the fact that sending hospitals under PPS in fiscal year 1984 were not eligible for outlier payments. The high charges associated with these long-stay cases (55 percent of charges for only 22 percent of transfer cases) are primarily responsible for the low ratio of reimbursement for all PPS transfer episodes (.513).

As noted in Part 2 of this report, sending hospitals have been eligible to receive cost outliers since the beginning of the second year of PPS. This should improve the low ratios associated with long stays prior to transfer in fiscal year 1984. Changes to outlier regulations described in Part 2 would further improve these ratios. Additional changes to the PPS transfer payment policy do not seem warranted at this time. However, HCFA intends to continue to monitor these ratios to ensure that they are in line with those for non-transfer cases.

Occasionally, current policy may lead to unjustified duplicate payments in multiple transfer situations. If the discharging hospital also had been a transferring hospital earlier during the patient's treatment, it would receive the full DRG as the discharging hospital and would also receive per diem payments for the transfer.

Although medical review has been targetted to focus on possible "gaming" situations, there still remain those cases where the multiple transfers are dictated by medical necessity. Nevertheless, it would appear inappropriate and inequitable in these cases to pay the full DRG to the discharging hospital plus per diem payments to the same hospital. Also, the second or middle hospital will receive the full DRG payment only if the patient is kept for the DRG's ALOS or transferred into an excluded distinct part unit for the convalescent period. We, therefore, plan

to investigate the feasibility of developing a special payment method to discourage "gaming" while compensating the hospitals involved in multiple transfer situations more appropriately.

Conclusion

The current transfer payment policy was originally designed as a temporary approach until a policy could be developed that would make a single payment to be divided between the two or more hospitals involved in furnishing care to patients treated at more than one hospital. The assumption behind the single payment approach was that the transferring hospital generally would stabilize the patient and then transfer the patient after one or two days to a hospital that would be better able to treat the case. Also, it was believed that the total resources associated with the transfer cases would be no greater, on average, than the resources associated with a single hospital episode.

Based on the data presented in this chapter, it is clear that a single payment based only on the DRG of either the receiving or sending hospital would not be sufficiently high, in general, to be split equitably between the two hospitals based on the actual resources that each expended in the episode. Changing to a single DRG payment would result in a reduction in payments to those hospitals that most often transfer patients (frequently small, rural, nonteaching hospitals), and those that most often receive patients on a transfer basis (frequently large, urban, teaching hospitals).

An alternative to splitting one of the DRG amounts involved between two hospitals

would be to develop a transfer DRG based upon a combination of the treatments provided in both hospitals. However, since the same DRG is assigned in each hospital in only 18.7 percent of the transfer episodes, the development of a combined single payment would be administratively complex with little or no accompanying gain realized from the elimination of the per diem payment system in favor of one payment.

Another alternative to the existing transfer payment policy would be to provide full payment to each provider. While it is clear that transfer cases are indeed different from single hospital episodes, two or more DRG payments for a single episode of care could create an incentive for inappropriate transfers. The per diem payment to transferring hospitals is a disincentive to inappropriate transfers between acute care hospitals while still providing adequate payment relative to the services provided.

In conclusion, a persuasive case cannot be made that the current transfer payment policy is inappropriate. Neither small rural hospitals or rural hospitals, as a group, are negatively affected by the current policy. Therefore, this report does not propose to modify the current transfer policy.

TABLE 3.1: DISTRIBUTION OF MEDICARE HOSPITAL INPATIENT EPISODES BY NUMBER OF TRANSFERS PER EPISODE

Number of Transfers Per Episode	Number of Episodes	Percent of Episodes
0	10,486,829	98.24
1	174,657	1.64
2	12,904	0.12
3	703	0.01
4	113	0.00
5	13	0.00
6	4	0.00
7	1	0.00
	10,675,224	100.00

Based on FY 1984 Medicare inpatient bills received through April 28, 1985.

TABLE 3.2: DISTRIBUTION OF MULTIPLE TRANSFER EPISODES BY TYPE OF MULTIPLE TRANSFER

Three Part Transfer	Number of Episodes	Percent of Episodes
Hospital A - Hospital B - Hospital A	9,806	76.0
Hospital A - Hospital B - Hospital C	3,098	24.0
	12,904	100.0

Four Part Transfer	Number of Episodes	Percent of Episodes
Hosp A - Hosp B - Hosp A - Hosp B	248	35.3
Hosp A - Hosp B - Hosp A - Hosp C	166	23.6
Hosp A - Hosp B - Hosp C - Hosp B	155	22.0
Hosp A - Hosp B - Hosp C - Hosp A	78	11.1
Hosp A - Hosp B - Hosp C - Hosp D	56	8.0
	703	100.0

Five Part Transfer	Number of Episodes	Percent of Episodes
Hosp A - Hosp B - Hosp A - Hosp B - Hosp A	55	48.7
Hosp A - Hosp B - Hosp A - Hosp C - Hosp A	32	28.3
All Other Combinations	26	23.0
	113	100.0

Based on FY 1984 Medicare inpatient bills received through April 28, 1985.

TABLE 3.3: NUMBER AND PERCENT OF A - B TRANSFER EPISODES BY DRG OF SENDING HOSPITAL FOR TOP 30 DRGs

DRG	Title	Number of Transfer Episodes	Percent of All Transfer Episodes	Percent of Transfer Episodes Within DRG
140	Angina Pectoris	13,229	7.6	4.2
14	Specific Cerebrovascular Disorders Except TIA	10,864	6.2	3.5
122	Circulatory Disorders With AMI W/O CV Comp Disch Alive	10,395	6.0	6.3
127	Heart Failure and Shock	7,342	4.2	1.5
138	Cardiac Arrhythmia + Conduction Disorders Age 69 and/or CC	5,941	3.4	2.9
121	Circulatory Disorders With AMI + CV Comp Disch Alive	5,420	3.1	5.7
132	Atherosclerosis Age 69 and/or CC	3,609	2.1	2.9
82	Respiratory Neoplasms	3,573	2.0	2.8
15	Transient Ischemic Attack	3,432	2.0	2.0
182	Esophagitis, Gastroent + Misc Digest Dis Age 69 and/or CC	3,312	1.9	0.9
89	Simple Pneumonia + Pleurisy Age 69 and/or CC	3,220	1.8	1.1
243	Medical Back Problems	2,919	1.7	1.4
236	Fractures of Hip + Pelvis	2,901	1.7	6.1
130	Peripheral Vascular Disorders Age 69 and/or CC	2,831	1.6	3.0
174	GI Hemorrhage Age 69 and/or CC	2,509	1.4	1.8
207	Disorders of the Biliary Tract Age 69 and/or CC	2,180	1.2	3.9
88	Chronic Obstructive Pulmonary Disease	2,154	1.2	1.0
316	Renal Failure W/O Dialysis	2,150	1.2	4.6
468	Unrelated OR Procedure	2,001	1.1	1.1
87	Pulmonary Edema + Respiratory Failure	1,752	1.0	2.1
172	Digestive Malignancy Age 69 and/or CC	1,707	1.0	3.0
124	Circulatory Disorders Exc AMI, with Card Cath + Comp Diag	1,673	1.0	7.0
180	G.I. Obstruction Age 69 and/or CC	1,499	0.9	2.4
210	Hip + Femur Procedures Except Major Joint Age 69 and/or CC	1,485	0.9	1.3
430	Psychoses	1,474	0.8	1.7
143	Chest Pain	1,465	0.8	1.9
403	Lymphoma or Leukemia Age 69 and/or CC	1,452	0.8	2.5
296	Nutritional and Misc. Metabolic Disorders Age 69 and/or CC	1,450	0.8	0.9
239	Pathological Fractures + Musculoskeletal + Conn Tiss Malig	1,397	0.8	2.3
294	Diabetes Age 35	1,396	0.8	1.0
Total		106,732	61.9	

TABLE 3.4: NUMBER AND PERCENT OF A - B TRANSFER EPISODES BY DRG OF RECEIVING HOSPITAL FOR TOP 30 DRGs

DRG	Title	Number of Transfer Episodes	Percent of All Transfer Episodes	Percent of Transfer Episodes Within DRG
107	Coronary Bypass W/O Cardiac Cath	9,265	5.3	22.3
14	Specific Cerebrovascular Disorders Except TIA	8,116	4.6	2.6
125	Circulatory Disorders Exc AMI, With Card Cath W/O Comp Diag	4,712	2.7	8.5
106	Coronary Bypass With Cardiac Cath	4,385	2.5	24.0
468	Unrelated OR Procedure	4,278	2.4	2.4
82	Respiratory Neoplasms	4,220	2.4	3.4
122	Circulatory Disorders With AMI W/O C.V. Comp Disch Alive	4,070	2.3	2.5
127	Heart Failure + Shock	3,902	2.2	0.8
116	Permanent Cardiac Pacemaker Implant W/O AMI or OHF	3,691	2.1	7.0
138	Cardiac Arrhythmia + Conduction Disorders Age 69 and/or CC	3,059	1.8	1.5
124	Circulatory Disorders Exc AMI, With Card Cath + Comp Diag	2,851	1.6	11.9
1	Craniotomy Age 17 Except for Trauma	2,581	1.5	12.7
12	Degenerative Nervous System Disorders	2,515	1.4	4.8
121	Circulatory Disorders With AMI + C.V. Comp Disch Alive	2,504	1.4	2.6
140	Angina Pectoris	2,457	1.4	0.8
430	Psychoses	2,450	1.4	2.9
132	Atherosclerosis Age 69 and/or CC	2,354	1.3	1.9
316	Renal Failure W/O Dialysis	2,022	1.2	4.4
403	Lymphoma or Leukemia Age 69 and/or CC	2,016	1.2	3.5
88	Chronic Obstructive Pulmonary Disease	2,002	1.1	0.9
148	Major Small + Large Bowel Procedures Age 69 and/or CC	1,996	1.1	1.9
182	Esophagitis, Gastroent + Misc Digest Dis Age 69 and/or CC	1,973	1.1	0.5
89	Simple Pneumonia + Pleurisy Age 69 and/or CC	1,918	1.1	0.6
210	Hip + Femur Procedures Except Major Joint Age 69 and/or CC	1,857	1.1	1.6
336	Transurethral Prostatectomy Age 69 and/or CC	1,795	1.0	1.2
123	Circulatory Disorders With AMI, Expired	1,773	1.0	2.6
15	Transient Ischemic Attacks	1,771	1.0	1.0
409	Radiotherapy	1,742	1.0	24.2
105	Cardiac Valve Procedure With Pump + W/O Cardiac Cath	1,687	1.0	15.9
108	Cardiothor Proc, Except Valve + Coronary Bypass, With Pump	1,664	1.0	18.7
Total		91,626	53.1	

TABLE 3.5: MEAN NUMBER AND PERCENT OF TRANSFERS RECEIVED, TRANSFERS SENT, AND NET TRANSFERS PER HOSPITAL BY REGION

	Medicare Cases	Transfers In: Number	Transfers In: Percent	Transfers Out: Number	Transfers Out: Percent	Net Transfers: Number	Net Transfers: Percent
National Average	1,864	35	1.9%	35	1.9%	0	0.0%
New England	2,411	38	1.6	37	1.5	1	0.1
Urban	2,811	45	1.6	39	1.4	6	0.2
Rural	1,216	14	1.2	30	2.4	-16	-1.2
Middle Atlantic	3,033	49	1.6	49	1.6	0	0.0
Urban	3,317	55	1.7	50	1.5	5	0.2
Rural	1,745	24	1.4	45	2.6	-21	-1.2
South Atlantic	2,294	38	1.6	39	1.7	-1	-0.1
Urban	3,041	57	1.9	39	1.3	18	0.6
Rural	1,343	14	1.0	38	2.8	-24	-2.8
East North Central	2,099	34	1.6	35	1.7	-1	-0.1
Urban	2,794	51	1.8	36	1.3	15	0.5
Rural	1,128	10	0.9	33	2.9	-23	-2.0
West North Central	1,728	42	2.5	41	2.4	1	0.1
Urban	2,894	94	3.2	40	1.3	54	1.9
Rural	1,127	16	1.4	42	3.7	-26	-2.3
East South Central	1,200	31	2.6	30	2.5	1	0.1
Urban	2,748	95	3.5	41	1.5	54	2.0
Rural	691	10	1.4	26	3.7	-16	-2.3
West South Central	1,428	32	2.2	32	2.2	0	0.0
Urban	2,166	60	2.8	32	1.5	28	1.3
Rural	843	9	1.0	32	3.8	-23	-2.8
Mountain	1,064	21	1.9	22	2.0	-1	-0.1
Urban	2,412	52	2.2	29	1.2	23	1.0
Rural	498	7	1.5	18	3.7	-11	-2.2
Pacific	1,741	30	1.7	30	1.7	0	0.0
Urban	2,101	38	1.8	33	1.5	5	0.3
Rural	688	8	1.1	22	3.2	-14	-2.1

TABLE 3.6: MEAN NUMBER AND PERCENT OF TRANSFERS RECEIVED, TRANSFERS SENT, AND NET TRANSFERS BY URBAN/RURAL TYPE

	Medicare Cases	Transfers In: Number	Transfers In: Percent	Transfers Out: Number	Transfers Out: Percent	Net Transfers: Number	Net Transfers: Percent
National Average	1,864	35	1.9%	35	1.9%	0	0.0%
Urban Hospitals	2,706	56	2.1	38	1.4	18	0.7
Core	3,235	90	2.8	37	1.2	53	1.6
Ring	2,240	25	1.1	39	1.7	-14	-0.6
Other MSA	2,631	53	2.0	38	1.4	15	0.6
Rural Hospitals	945	11	1.2	31	3.3	-20	-2.1
Adjacent to MSA	1,034	10	1.0	34	3.3	-24	-2.3
Nonadjacent to MSA	859	12	1.4	29	3.3	-17	-1.9
Sole Community Hospitals	704	7	1.0	26	3.7	-19	-2.7
Rural Referral Centers	3,067	77	2.5	49	1.6	28	0.9

TABLE 3.7: MEAN NUMBER AND PERCENT OF TRANSFERS RECEIVED, TRANSFERS SENT, AND NET TRANSFERS BY SIZE OF HOSPITAL AND TEACHING STATUS

	Medicare Cases	Transfers In: Number	Transfers In: Percent	Transfers Out: Number	Transfers Out: Percent	Net Transfers: Number	Net Transfers: Percent
National Average	1,864	35	1.9%	35	1.9%	0	0.0%
Urban Hospitals	2,706	56	2.1	38	1.4	18	0.7
0- 99 Beds	698	6	0.9	23	3.3	-17	-2.4
100-404 Beds	2,579	39	1.5	39	1.5	0	0.0
405-684 Beds	5,240	149	2.9	52	1.0	97	1.9
685 + Beds	7,424	275	3.7	68	0.9	207	2.8
Rural Hospitals	945	11	1.2	31	3.3	-20	-2.1
0- 99 Beds	586	5	0.9	26	4.5	-21	-3.6
100-169 Beds	1,654	18	1.1	45	2.7	-27	-1.6
170 + Beds	3,011	55	1.8	52	1.7	3	0.1
Nonteaching Hospitals	1,408	18	1.2	33	2.3	-15	-1.1
Teaching Hospitals with Resident/bed 0.25	3,836	96	2.5	42	1.1	54	1.4
Teaching Hospitals with Resident/bed 0.25	3,836	162	4.2	49	1.2	113	3.0

TABLE 3.8(a): MEAN LENGTH OF STAY OF A - B TRANSFER EPISODES WITH IDENTICAL DRG ASSIGNMENTS IN BOTH HOSPITALS BY DRG OF SENDING HOSPITAL FOR TOP 30 DRGs

DRG	Title	Mean LOS Sending Hospital	Mean LOS Receiving Hospital	Sum of Columns 1 and 2	Mean LOS Single Hospital Episode
140	Angina Pectoris	4.9	6.4	11.3	5.8
14	Specific Cerebrovascular Disorders Except TIA	8.3	18.6	26.9	12.9
122	Circulatory Disorders With AMI W/O CV Comp Disch Alive	5.6	8.7	14.3	11.0
127	Heart Failure and Shock	6.7	10.4	17.1	9.0
138	Cardiac Arrhythmia + Conduction Disorders Age 69 and/or CC	4.9	8.5	13.4	6.6
121	Circulatory Disorders With AMI + CV Comp Disch Alive	6.2	12.0	18.2	12.8
132	Atherosclerosis Age 69 and/or CC	6.3	6.5	12.8	7.3
82	Respiratory Neoplasms	9.4	12.8	22.2	9.8
15	Transient Ischemic Attack	3.9	6.4	10.3	6.4
182	Esophagitis, Gastroent + Misc Digest Dis Age 69 and/or CC	5.7	8.4	14.1	6.3
89	Simple Pneumonia + Pleurisy Age 69 and/or CC	6.4	11.0	17.4	9.8
243	Medical Back Problems	7.5	9.5	17.0	8.1
236	Fractures of Hip + Pelvis	5.0	14.5	19.5	13.9
130	Peripheral Vascular Disorders Age 69 and/or CC	5.2	8.6	13.8	8.7
174	GI Hemorrhage Age 69 and/or CC	3.4	7.6	11.0	7.8
207	Disorders of the Biliary Tract Age 69 and/or CC	5.4	8.3	13.7	7.2
88	Chronic Obstructive Pulmonary Disease	8.2	11.3	19.5	8.8
316	Renal Failure W/O Dialysis	6.4	13.0	19.4	10.2
468	Unrelated OR Procedure	15.3	25.3	40.6	17.1
87	Pulmonary Edema + Respiratory Failure	7.0	13.7	20.7	10.4
172	Digestive Malignancy Age 69 and/or CC	10.1	13.8	23.9	10.4
124	Circulatory Disorders Exc AMI, with Card Cath + Comp Diag	9.7	7.9	17.6	6.9
180	G.I. Obstruction Age 69 and/or CC	4.7	10.0	14.7	7.7
210	Hip + Femur Procedures Except Major Joint Age 69 and/or CC	12.9	25.4	38.3	17.3
430	Psychoses	8.2	21.1	29.3	15.5
143	Chest Pain	3.9	4.1	8.0	4.7
403	Lymphoma or Leukemia Age 69 and/or CC	8.2	15.8	24.0	10.6
296	Nutritional and Misc. Metabolic Disorders Age 69 and/or CC	6.8	11.5	18.3	8.6
239	Pathological Fractures + Musculoskeletal + Conn Tiss Malig	8.6	14.5	23.1	10.7
294	Diabetes Age 35	7.0	11.3	18.3	8.6

TABLE 3.8(b): MEAN LENGTH OF A - B TRANSFER EPISODES WITH DIFFERENT DRG ASSIGNMENTS IN EACH HOSPITAL BY DRG OF SENDING HOSPITAL FOR TOP 30 DRGs

DRG	Title	Mean LOS Sending Hospital	Mean LOS Receiving Hospital	Sum of Columns 1 and 2	Mean LOS Single Hospital Episode
140	Angina Pectoris	5.3	10.3	15.6	5.8
14	Specific Cerebrovascular Disorders Except TIA	10.7	22.3	33.0	12.9
122	Circulatory Disorders With AMI W/O CV Comp Disch Alive	7.2	12.0	19.2	11.0
127	Heart Failure and Shock	7.8	13.6	21.4	9.0
138	Cardiac Arrhythmia + Conduction Disorders Age 69 and/or CC	5.0	10.0	5.0	6.6
121	Circulatory Disorders With AMI + CV Comp Disch Alive	8.2	12.1	20.3	12.8
132	Atherosclerosis Age 69 and/or CC	6.0	11.1	17.1	7.3
82	Respiratory Neoplasms	8.9	13.9	22.8	9.8
15	Transient Ischemic Attack	5.4	11.5	16.9	6.4
182	Esophagitis, Gastroent + Misc Digest Dis Age 69 and/or CC	6.1	13.7	19.8	6.3
89	Simple Pneumonia + Pleurisy Age 69 and/or CC	9.0	14.1	25.1	9.8
243	Medical Back Problems	8.9	15.4	24.3	8.1
236	Fractures of Hip + Pelvis	3.4	16.8	20.2	13.9
130	Peripheral Vascular Disorders Age 69 and/or CC	5.5	16.4	21.9	8.7
174	GI Hemorrhage Age 69 and/or CC	5.4	13.3	18.7	7.8
207	Disorders of the Biliary Tract Age 69 and/or CC	5.0	13.6	18.6	7.2
88	Chronic Obstructive Pulmonary Disease	8.4	13.4	21.8	8.8
316	Renal Failure W/O Dialysis	6.1	17.0	23.1	10.2
468	Unrelated OR Procedure	19.7	18.6	38.3	17.1
87	Pulmonary Edema + Respiratory Failure	7.9	13.7	21.6	10.4
172	Digestive Malignancy Age 69 and/or CC	7.4	17.0	24.4	10.4
124	Circulatory Disorders Exc AMI, with Card Cath + Comp Diag	7.5	12.1	19.6	6.9
180	G.I. Obstruction Age 69 and/or CC	4.0	14.7	18.7	7.7
210	Hip + Femur Procedures Except Major Joint Age 69 and/or CC	14.8	17.3	32.1	17.3
430	Psychoses	9.2	16.5	25.7	15.5
143	Chest Pain	4.6	8.3	12.9	4.7
403	Lymphoma or Leukemia Age 69 and/or CC	9.1	15.4	24.5	10.6
296	Nutritional and Misc. Metabolic Disorders Age 69 and/or CC	7.5	13.7	21.4	8.6
239	Pathological Fractures + Musculoskeletal + Conn Tiss Malig	8.9	17.4	26.3	10.7
294	Diabetes Age 35	8.5	16.8	25.3	8.6

TABLE 3.8(c): MEAN LENGTH OF STAY OF A - B TRANSFER EPISODES (COMBINED IDENTICAL AND DIFFERENT DRGS) BY DRG OF SENDING HOSPITAL FOR TOP 30 DRGs

DRG	Title	Mean LOS Sending Hospital	Mean LOS Receiving Hospital	Sum of Columns 1 and 2	Mean LOS Single Hospital Episode
140	Angina Pectoris	5.3	9.9	15.2	5.8
14	Specific Cerebrovascular Disorders Except TIA	9.6	20.6	30.2	12.9
122	Circulatory Disorders With AMI W/O CV Comp Disch Alive	6.9	11.3	18.2	11.0
127	Heart Failure and Shock	7.6	12.9	20.5	9.0
138	Cardiac Arrhythmia + Conduction Disorders Age 69 and/or CC	5.0	9.7	14.7	6.6
121	Circulatory Disorders With AMI + CV Comp Disch Alive	7.9	12.1	20.0	12.8
132	Atherosclerosis Age 69 and/or CC	6.0	10.8	16.8	7.3
82	Respiratory Neoplasms	7.2	13.3	22.5	9.8
15	Transient Ischemic Attack	5.1	10.3	15.4	6.4
182	Esophagitis, Gastroent + Misc Digest Dis Age 69 and/or CC	6.0	12.7	18.7	6.3
89	Simple Pneumonia + Pleurisy Age 69 and/or CC	8.4	13.4	21.8	9.8
243	Medical Back Problems	8.5	13.7	22.2	8.1
236	Fractures of Hip + Pelvis	3.6	16.5	20.1	13.9
130	Peripheral Vascular Disorders Age 69 and/or CC	5.5	15.3	20.8	8.7
174	GI Hemorrhage Age 69 and/or CC	4.8	11.6	16.4	7.8
207	Disorders of the Biliary Tract Age 69 and/or CC	5.1	12.7	17.8	7.2
88	Chronic Obstructive Pulmonary Disease	8.4	12.8	21.2	8.8
316	Renal Failure W/O Dialysis	6.2	16.2	22.4	10.2
468	Unrelated OR Procedure	19.5	18.7	38.4	17.1
87	Pulmonary Edema + Respiratory Failure	7.8	13.7	21.5	10.4
172	Digestive Malignancy Age 69 and/or CC	8.0	16.3	24.3	10.4
124	Circulatory Disorders Exc AMI, with Card Cath + Comp Diag	7.5	12.0	19.5	6.9
180	G.I. Obstruction Age 69 and/or CC	4.1	14.1	18.2	7.7
210	Hip + Femur Procedures Except Major Joint Age 69 and/or CC	14.8	17.4	32.2	17.3
430	Psychoses	8.7	19.0	27.7	15.5
143	Chest Pain	4.6	8.0	12.6	4.7
403	Lymphoma or Leukemia Age 69 and/or CC	8.5	15.7	24.2	10.6
296	Nutritional and Misc. Metabolic Disorders Age 69 and/or CC	7.5	13.7	21.2	8.6
239	Pathological Fractures + Musculoskeletal + Conn Tiss Malig	8.8	16.7	25.5	10.7
294	Diabetes Age 35	8.3	15.9	24.2	8.6

TABLE 3.9(a): MEAN TOTAL CHARGES FOR A - B TRANSFER EPISODES WITH IDENTICAL DRG ASSIGNMENTS IN BOTH HOSPITALS BY DRG OF SENDING HOSPITAL FOR TOP 30 DRGs

DRG	Title	Mean Charges Sending Hospital	Mean Charges Receiving Hospital	Sum of Columns 1 and 2	Mean for Single Hospital Episode
140	Angina Pectoris	2,844	4,896	7,740	2,873
14	Specific Cerebrovascular Disorders Except TIA	4,390	8,741	13,131	5,533
122	Circulatory Disorders With AMI W/O CV Comp Disch Alive	3,610	5,530	9,140	5,636
127	Heart Failure and Shock	4,151	6,655	10,806	4,290
138	Cardiac Arrhythmia + Conduction Disorders Age 69 and/or CC	3,184	6,538	9,722	3,431
121	Circulatory Disorders With AMI + CV Comp Disch Alive	5,155	8,087	13,242	7,344
132	Atherosclerosis Age 69 and/or CC	3,389	4,899	8,288	3,369
82	Respiratory Neoplasms	4,777	6,282	11,059	4,722
15	Transient Ischemic Attack	1,686	3,308	4,994	2,663
182	Esophagitis, Gastroent + Misc Digest Dis Age 69 and/or CC	2,366	3,940	6,306	2,532
89	Simple Pneumonia + Pleurisy Age 69 and/or CC	3,964	7,110	11,074	4,906
243	Medical Back Problems	2,384	3,697	6,081	2,834
236	Fractures of Hip + Pelvis	2,032	5,755	7,787	4,767
130	Peripheral Vascular Disorders Age 69 and/or CC	2,299	4,999	7,298	3,675
174	GI Hemorrhage Age 69 and/or CC	2,462	4,480	6,942	3,927
207	Disorders of the Biliary Tract Age 69 and/or CC	2,685	4,787	7,473	3,246
88	Chronic Obstructive Pulmonary Disease	5,838	7,456	13,294	4,649
316	Renal Failure W/O Dialysis	4,088	9,054	13,142	5,755
468	Unrelated OR Procedure	11,432	22,328	33,760	10,346
87	Pulmonary Edema + Respiratory Failure	9,397	14,507	23,904	7,554
172	Digestive Malignancy Age 69 and/or CC	4,615	6,274	10,889	4,588
124	Circulatory Disorders Exc AMI, with Card Cath + Comp Diag	11,896	9,546	21,442	4,474
180	G.I. Obstruction Age 69 and/or CC	2,166	4,668	6,833	3,294
210	Hip + Femur Procedures Except Major Joint Age 69 and/or CC	9,165	13,775	22,941	8,566
430	Psychoses	2,531	6,190	8,721	4,671
143	Chest Pain	2,378	2,507	4,885	2,503
403	Lymphoma or Leukemia Age 69 and/or CC	4,284	11,377	15,661	5,605
296	Nutritional and Misc. Metabolic Disorders Age 69 and/or CC	2,963	5,327	8,290	3,572
239	Pathological Fractures + Musculoskeletal + Conn Tiss Malig	3,190	5,815	9,005	3,932
294	Diabetes Age 35	3,025	4,949	7,974	3,232

TABLE 3.9(b): MEAN TOTAL CHARGES FOR A - B TRANSFER EPISODES WITH DIFFERENT DRG ASSIGNMENTS IN EACH HOSPITAL BY DRG OF SENDING HOSPITAL FOR TOP 30 DRGs

DRG	Title	Mean Charges Sending Hospital	Mean Charges Receiving Hospital	Sum of Columns 1 and 2	Mean for Single Hospital Episode
140	Angina Pectoris	3,104	12,837	15,941	2,873
14	Specific Cerebrovascular Disorders Except TIA	5,199	12,195	17,393	5,533
122	Circulatory Disorders With AMI W/O CV Comp Disch Alive	4,783	14,864	19,647	5,636
127	Heart Failure and Shock	4,548	13,215	17,763	4,290
138	Cardiac Arrhythmia + Conduction Disorders Age 69 and/or CC	3,015	10,148	13,163	3,431
121	Circulatory Disorders With AMI + CV Comp Disch Alive	6,468	14,898	21,366	7,344
132	Atherosclerosis Age 69 and/or CC	3,361	11,591	15,251	3,369
82	Respiratory Neoplasms	4,427	7,912	12,339	4,722
15	Transient Ischemic Attack	2,483	7,455	9,938	2,663
182	Esophagitis, Gastroent + Misc Digest Dis Age 69 and/or CC	2,809	9,564	12,373	2,532
89	Simple Pneumonia + Pleurisy Age 69 and/or CC	5,395	10,440	15,835	4,906
243	Medical Back Problems	3,178	7,721	10,899	2,834
236	Fractures of Hip + Pelvis	1,653	8,749	10,402	4,767
130	Peripheral Vascular Disorders Age 69 and/or CC	2,791	13,912	16,703	3,675
174	GI Hemorrhage Age 69 and/or CC	3,444	10,858	14,302	3,927
207	Disorders of the Biliary Tract Age 69 and/or CC	2,454	9,509	11,963	3,246
88	Chronic Obstructive Pulmonary Disease	5,244	10,142	15,386	4,649
316	Renal Failure W/O Dialysis	3,954	13,612	17,566	5,755
468	Unrelated OR Procedure	14,065	13,071	27,136	10,346
87	Pulmonary Edema + Respiratory Failure	7,377	12,992	20,369	7,554
172	Digestive Malignancy Age 69 and/or CC	3,312	11,589	14,901	4,588
124	Circulatory Disorders Exc AMI, with Card Cath + Comp Diag	5,307	17,565	22,872	4,474
180	G.I. Obstruction Age 69 and/or CC	1,941	10,624	12,565	3,294
210	Hip + Femur Procedures Except Major Joint Age 69 and/or CC	8,445	6,598	15,043	8,566
430	Psychoses	3,021	6,604	9,625	4,671
143	Chest Pain	2,706	7,481	10,187	2,503
403	Lymphoma or Leukemia Age 69 and/or CC	4,908	10,424	15,882	5,605
296	Nutritional and Misc. Metabolic Disorders Age 69 and/or CC	3,956	8,055	12,011	3,572
239	Pathological Fractures + Musculoskeletal + Conn Tiss Malig	3,438	7,913	11,351	3,932
294	Diabetes Age 35	3,596	10,681	14,277	3,232

TABLE 3.9(c): MEAN TOTAL CHARGES FOR A - B TRANSFER EPISODES (COMBINED IDENTICAL AND DIFFERENT DRG's) BY DRG OF SENDING HOSPITAL FOR TOP 30 DRGs

DRG	Title	Mean Charges Sending Hospital	Mean Charges Receiving Hospital	Sum of Columns 1 and 2	Mean for Single Hospital Episode
140	Angina Pectoris	2,844	4,896	7,740	2,873
14	Specific Cerebrovascular Disorders Except TIA	4,390	8,741	13,131	5,533
122	Circulatory Disorders With AMI W/O CV Comp Disch Alive	3,610	5,530	9,140	5,636
127	Heart Failure and Shock	4,151	6,655	10,806	4,290
138	Cardiac Arrhythmia + Conduction Disorders Age 69 and/or CC	3,184	6,538	9,722	3,431
121	Circulatory Disorders With AMI + CV Comp Disch Alive	5,155	8,087	13,242	7,344
132	Atherosclerosis Age 69 and/or CC	3,389	4,899	8,288	3,369
82	Respiratory Neoplasms	4,777	6,282	11,059	4,722
15	Transient Ischemic Attack	1,686	3,308	4,994	2,663
182	Esophagitis, Gastroent + Misc Digest Dis Age 69 and/or CC	2,366	3,940	6,306	2,532
89	Simple Pneumonia + Pleurisy Age 69 and/or CC	3,964	7,110	11,074	4,906
243	Medical Back Problems	2,384	3,697	6,081	2,834
236	Fractures of Hip + Pelvis	2,032	5,755	7,787	4,767
130	Peripheral Vascular Disorders Age 69 and/or CC	2,299	4,999	7,298	3,675
174	GI Hemorrhage Age 69 and/or CC	2,462	4,480	6,942	3,927
207	Disorders of the Biliary Tract Age 69 and/or CC	2,685	4,787	7,473	3,246
88	Chronic Obstructive Pulmonary Disease	5,838	7,456	13,294	4,649
316	Renal Failure W/O Dialysis	4,088	9,054	13,142	5,755
468	Unrelated OR Procedure	11,432	22,328	33,760	10,346
87	Pulmonary Edema + Respiratory Failure	9,397	14,507	23,904	7,554
172	Digestive Malignancy Age 69 and/or CC	4,615	6,274	10,889	4,588
124	Circulatory Disorders Exc AMI, with Card Cath + Comp Diag	11,896	9,546	21,442	4,474
180	G.I. Obstruction Age 69 and/or CC	2,166	4,668	6,833	3,294
210	Hip + Femur Procedures Except Major Joint Age 69 and/or CC	9,165	13,775	22,941	8,566
430	Psychoses	2,531	6,190	8,721	4,671
143	Chest Pain	2,378	2,507	4,885	2,503
403	Lymphoma or Leukemia Age 69 and/or CC	4,284	11,377	15,661	5,605
296	Nutritional and Misc. Metabolic Disorders Age 69 and/or CC	2,963	5,327	8,290	3,572
239	Pathological Fractures + Musculoskeletal + Conn Tiss Malig	3,190	5,815	9,005	3,932
294	Diabetes Age 35	3,025	4,949	7,974	3,232

Table 3.10: Mean Ratio of PPS Reimbursements To Total Charges for Transfer Episodes By Length-of-Stay in Sending Hospital

LOS	Number of Episodes	Payment Ratio
1	14,002	.872
2	10,704	.770
3	8,927	.725
4	7,557	.684
5	6,415	.667
6	5,583	.660
7	4,872	.633
8	3,968	.609
9	3,245	.578
10-19	13,450	.467
20+	4,578	.276
TOTAL	83,301*	.513
Total PPS Inpatient Stays	5,192,056**	.693

*Based on FY 1984 Medicare inpatient bills received through June 1986.

**Based on FY 1984 Medicare inpatient bills received through September 1986.

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